AMENDMENTS TO THE CLAIMS

1-15. (Canceled)

16. (Currently Amended) A method of monitoring a feature of a blast, the method comprising the steps of:

- providing a conductor arrangement connected to a detonator for providing blast control signals to the detonator from a remote blast controller and which detonator causes part of the blast;
- generating a monitoring signal in the conductor arrangement;
- sensing a change in a blast feature monitoring parameter of the signal as a result of the blast; and
- processing data relating to the change for providing data relating to the feature,

wherein the monitoring signal comprises a first signal and a derivative signal of the first signal.

17. (Original) A method as claimed in claim 16 wherein the feature is velocity of detonation (VOD) of a main charge initiated by the detonator.

18. (Original) A method as claimed in claim 16 or claim 17 wherein the conductor arrangement is connected to the detonator to control the detonator.

19. (Previously Presented) A method as claimed in claim 16 wherein the conductor arrangement comprises a pair of twisted conductors.

20. (Canceled)

21. (Currently Amended) A method as claimed in claim [[20]] 16 wherein the blast feature monitoring parameter relates to a differences between corresponding signal parameters of the first signal and the derivative signal.

22. (Original) A method as claimed in claim 21 comprising the steps of causing a signal generator to generate the first signal for propagation on the conductor arrangement, generating a derivative signal by causing a reflection of the first signal, and monitoring changes in the difference in corresponding signal parameters of the first signal and the reflection.

23. (Currently Amended) A method as claimed in ~~any one of claims 20 to 22~~ claim 16 wherein the first signal is generated by a signal generator at a remote blast controller which is connected to said conductor arrangement by a main conductor arrangement and which is also connected to a blast feature monitoring station.

24. (Original) A method as claimed in claim 22 wherein the first signal is generated by a signal generator at a remote blast controller and wherein data relating to the changes is transmitted

from a sensor connected to the conductor arrangement via a wireless link to a remote blast feature monitoring station.

25. (Original) A method as claimed in claim 22 wherein the first signal is generated by a signal generator connected directly to the conductor arrangement and wherein data relating to the changes is transmitted by a sensor connected to the conductor arrangement via a wireless link to a remote blast feature monitoring station.

26-29. (Cancelled)

30. (Currently Amended) A system for monitoring a feature of a blast, the system comprising:

- a detonator for causing at least part of the blast;
- a conductor arrangement connected to the detonator for controlling operation of the detonator from a remote blast controller;
- a monitoring signal generator arranged to generate a monitoring signal in the conductor arrangement, wherein the monitoring signal comprises a first signal and a derivative signal of the first signal; and
- a sensor for sensing changes in a blast feature monitoring parameter of the monitoring signal as a result of the blast.

31. (Original) A system as claimed in claim 30 wherein the sensor is located outside of a housing of the detonator.

32. (Original) A system as claimed in claim 30 or claim 31 wherein the signal generator is connected to the conductor arrangement by a main conductor arrangement extending between the conductor arrangement and the signal generator.

33. (Previously Presented) A system as claimed in claim 30 wherein the signal generator forms part of a blast controller.

34. (Previously Presented) A system as claimed in claim 30 wherein the sensor comprises a sensing circuit forming part of the blast controller.

35. (Previously Presented) A system as claimed in claim 30 wherein the sensor is connected directly to the conductor arrangement and wherein the data relating to the changes is transmitted from the sensor via a wireless link to a remote blast feature monitoring station.

36. (Original) A system as claimed in claim 35 wherein the sensor is connected to the conductor arrangement at a point where the conductor arrangement branches from a main conductor arrangement.

37. (Original) A system as claimed in claim 30 wherein the signal generator and the sensor are connected directly to the conductor arrangement and wherein the data relating to changes in

the blast feature monitoring parameter is transmitted via a wireless link from the sensor to a remote blast feature monitoring station.